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FOREST PEST MANAGEMENT

Technology Update

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Southern Pine Beetle Fact Sheet Number 5

INSECTICIDES FOR THE SOUTHERN PINE BEETLE

The best way to protect your pine trees is to make sure they are not attacked in the first place. Keep them healthy. A wounded, sick or weakened pine is an invitation to dinner for southern pine beetles.

But what if it is already too late for an ounce of protection? By the time you spot telltale symptoms of beetle attack — pitch tubes, feeding galleries in the inner bark, and fading needles — it is too late to save the tree.

Your only alternative is to stop beetle spread to nearby pines. You can do this in two ways. First, if the beetles are still under or in the bark of the attacked pines, cut the trees down and haul them away, or burn them. This should break up the center of beetle emergence and stop them from attacking other trees.

Second, spray the attacked pines with an approved insecticide that will kill eggs, larvae, pupae and adults still under the bark. Or, you may choose to spray uninfested trees next to the ones under attack to protect them during the period of beetle emergence.

Whichever method of control you choose, act quickly or the beetles will spread to other pines. Check all pines carefully, as successful remedial control depends on treating all infested trees.

Two insecticides are approved for use against the southern pine beetle: lindane and Dursban 4E (chlorpyrifos). Lindane is available as a liquid

(emulsifiable) concentrate that is diluted with water and applied as a 0.5 percent solution. Lindane concentrates are sold in various strengths, so follow the mixing directions on the container label. This insecticide has a long history of providing effective control of the southern pine beetle. **Lindane is classified as a restricted-use pesticide for forestry applications. Specific protective equipment must be worn when applying this chemical.**

Dursban was registered for southern pine beetle control in February 1979. It is sold as a liquid concentrate containing 4 pounds of insecticide per gallon of concentrate. Prepare the spray by mixing 2 2/3 fluid ounces of concentrate with water to make 1 gallon (20.8 ml in 1 liter). This mixture is equivalent to 2.4 gallons in 100 gallons of water. **Dursban is to be applied only by or under the supervision of pest control operators or other trained personnel responsible for insect control programs.**

Apply lindane or Dursban by hand- or power-operated ground spray equipment. When protecting uninfested pines, spray only the main trunk up to the upper one-third of the crown. Do not spray the limbs.

However, when treating attacked pines, cut, limb and buck the infested trees into workable lengths. Spray the entire infested bark surface to the point of runoff to ensure adequate control.

Recommendations for the use of Dursban and its registration by the Environmental Protection Agency for use against the southern pine beetle are

based on research conducted through the USDA Expanded Southern Pine Beetle Research and Applications Program. Sumithion was registered for southern pine beetle control in June 1982. However, it is no longer available for purchase.

CAUTION: Pesticides can be injurious to humans, domestic animals, desirable plants, fish, and other wildlife -- if not handled or applied properly. Use all pesticides selectively and carefully. Follow recommended practices for the disposal of surplus pesticides and pesticide containers. Some States have restrictions on the use of certain pesticides. Check your local and State regulations. Also, because registrations of pesticides are under constant review by the Environmental Protection

Agency, consult your State forestry agency, county agent, or State extension agent to be sure the intended use is still registered.

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